

PRELIMINARY AMENDMENT AND RESPONSE TO RESTRICTION REQUIREMENT
Attorney Docket No.: Q84937
Application No.: 10/516,516

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Please cancel claims 1-9.

10. (new): A screw for use in an extruder for carrying a rubber material supplied from a hopper port at the rear of the cylinder of the extruder by the screw, molding it into a predetermined sectional form and extruding it from a nozzle attached to the end of the cylinder, wherein

the height of a flight portion located below the hopper port of the screw is lower than the height of a flight portion on a downstream side and continuously changes in a peripheral direction at a predetermined angle.

11. (new): The screw according to claim 10, wherein a portion where the height of the flight portion is lower than the height of the flight portion on a downstream side has an angle of 180° or less.

12. (new): The screw according to claim 10, wherein the number of threads on an upstream side of the screw is made smaller than the number of threads on a downstream side.

13. (new): The screw for use in an extruder according to claim 10, wherein the interval of the threads on an upstream side is made wider than the interval of the threads on a downstream side.

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14. (new): The screw for use in an extruder according to claim 10, wherein the diameters of the threads on an upstream side of the screw are made larger than the diameters of the threads on a downstream side.

15. (new): The screw for use in an extruder according to claim 10, wherein the height of the flight located below the hopper port is made 2 to 6 % smaller than the diameter of the screw.

16. (new) A process for producing a screw for use in an extruder for carrying a rubber material supplied from a hopper port at the rear of the cylinder of the extruder by the screw, molding it into a predetermined sectional form and extruding it from a nozzle attached to the end of the cylinder, the process comprising cutting away a peripheral portion of a flight portion located below the hopper port of an existing screw at a predetermined angle so that the height of the flight portion continuously changes in a peripheral direction to produce a screw having the flight portion located below the hopper port lower than the height of the flight portion on a downstream side.

17. (new) The process for producing a screw for extruders according to claim 16, wherein the amount of the peripheral portion cut away is 2 to 6 % of the diameter of the screw.

18. (new): A process for producing a tire rubber member by using the screw according to claim 10.

19. (new): A tire rubber member manufactured by using the screw according to claim 10 and having a gauge fluctuation of 0.15 mm or less.